

10.0 ENVIRONMENTAL PLANNING ELEMENT

The *Environmental Planning Element* of the **Sedona Community Plan** is presented in the following sections:

- 10.1 Key Issues
- 10.2 Recommendations
- 10.3 Action Program



Overview

From the inception of the community planning process, as well as the many previous efforts, *preservation of open space* and protection of its environmental quality has been of paramount importance to the citizens of Sedona. The preservation of not only scenic quality, but also of the natural resources, has remained a strong desire of Sedona citizens for years. During the original planning process, the community identified the following general characteristics of the environment, that taken together, give the area its great natural beauty:

- \$ Oak Creek and its adjacent riparian zone;
- \$ The numerous washes and their wildlife inhabitants that utilize them as corridors;
- \$ The natural vegetation, especially the Arizona cypress, the juniper, piñon pines, and manzanita; and
- \$ The surrounding rock formations and the view corridors to them.

Although many other factors contribute to the natural beauty of the area, the community holds these as perhaps the most important to preserve and protect. The importance of preserving and protecting the environment is not only for the enjoyment of the citizens of Sedona, but it is the basis of the economy of Sedona. The proper long-term stewardship of these resources will ensure their long-term enjoyment by future generations and will ensure that the economy can continue to be stable and grow.

In order to evaluate the potential effects various land use development scenarios might have on these major environmental factors, two mapping processes were conducted as part of the Community Plan.

- \$ A Scenic Resource Inventory
- \$ General Environmental Conditions Inventory

Although adequate for the purposes of the Community Plan, these mapping processes were only a beginning of the ongoing mapping needed to fully understand the effects that existing and future land uses will have on the scenic and environmental quality. The City's preparation of Environmentally Sensitive Lands Regulations resulted in the generation of Scenic Sensitivity, Protected Ridge Line and Protected Water Course mapping.

Within the incorporated boundaries of Sedona, approximately 50 percent of the land area is within the Coconino National Forest. One of the purposes of incorporating so much National Forest land was to develop policies and strategies that could influence US Forest Service management of these lands that are important to be preserved as open space. Since the issue of Open Space preservation is a very special land use consideration and is a private as well as public lands issue, this subject is addressed separately in the *Open Space Element*.

10.1 KEY ISSUES

The urban interface with the natural environment in Sedona continues to pose challenges. The spectacular scenery and natural beauty of Oak Creek attract millions of visitors per year to experience it. This fact, coupled with the growth of the community, will continue to impact the scenic and environmental quality of the area.

Continued growth can potentially impact the environment in several ways. In 1997, the Council-appointed Advisory Committee on Growth identified several issues and problems in conjunction with community input:

- \$ Increasing automobile traffic and the addition of fireplaces and wood-burning stoves will contribute to the pollution of the air. On-going US Forest Service controlled burning also contributes to reduced visibility on some days.
- \$ Increases in both visitor and resident population will also continue to raise noise levels from both automobile and air traffic.
- \$ The visual impacts of growth include alterations to topography and vegetation, littering and decreased nighttime dark sky.
- \$ Accessibility to public lands by greater numbers of people may have additional impacts on nearby archeological sites and natural habitat.
- \$ The area aquifer has not been extensively evaluated and potential degradation of the water supply and quality are a potential result of continued growth.

During the 1998 update of the Community Plan, significant concerns regarding aircraft noise were voiced by many in the community as well.

In the 2001-2002 Community Plan Update process, community concerns focused on the need for more pro-active measures for water conservation and education, concerns over water supply and the need for air quality issues to be addressed in land use and traffic circulation planning.

Some examples of other environmental issues that have been identified include:

- \$ Unauthorized trails on National Forest lands, causing erosion and loss of native vegetation
- \$ Pollution of Oak Creek from septic tanks, runoff and heavy use
- \$ Visual impacts of overhead power lines

As the City continues to grow, construction-related impacts to the environment, such as dust and potential stormwater pollution, represent additional concerns.

The City has taken some bold steps toward mitigating many of these problems. The following actions have already been taken to:

1. *Preserve existing native vegetation and the natural landscape and to integrate the manmade with the natural environment:*

- **Preparation of Design Standards for Multifamily, Commercial and Community Facility uses** - “Design Review Manual” adopted in 1993 and later incorporated into the “Land Development Code”.

The “Design Review Manual” received an Arizona Planning Association award and was developed in conjunction with an advisory committee. The City’s design standards are a critical part of the development review process for multifamily and commercial projects in the city. The Design Review Manual was updated in January 2002.

- \$ **Preparation of an Environmentally Sensitive Lands Ordinance to establish a mechanism to limit and/or control development in environmentally-sensitive areas** - Environmentally-Sensitive Lands Regulations were adopted in 1993 and later incorporated into the Land Development Code.

The result of over two years of intensive work by staff and advisory committee, the Environmentally-sensitive Land Regulations established requirements for on-site preservation of existing vegetation, set new height and building massing requirements, provided regulations on color, vegetation and grading, preservation of environmentally-sensitive areas in conjunction with new development projects and established new review and administrative procedures for all new development.

2. *Protect the dark nighttime sky and minimize lighting impacts on adjacent properties:*

The City’s first comprehensive Lighting Ordinance was adopted in 2001, receiving a prestigious local award from “Keep Sedona Beautiful”.

3. *Bury overhead utility lines:*

The City has formed a cooperative agreement with APS to bury existing overhead lines. APS pays approximately 50 percent of the costs. Although funding has been a major constraint, some existing lines have been under-grounded along Chapel Road, Uptown and in conjunction with new development. Significant capital funding was committed for the 2001-2002 fiscal year for specific projects under the APS agreement and power lines have also been placed underground on SR 89A between Old Marketplace and Walgreens. Although all new utility lines are required to be placed underground, staff will also be evaluating potential amendments to the development review process to require existing lines to be placed underground.

4. *Mitigate the effects of vehicular, construction and mechanically-generated noise on the community:*

The City adopted a new Sound Ordinance in 2001. A Citizens Noise Abatement Committee was also established in 1999 to work with the Sedona Airport Administration and the community to address aircraft noise and air traffic issues in the Sedona area. The City is represented on this committee, comprised of a broad cross-section of community

interests and organizations. Some short term mitigation has been successfully implemented. An application for a control tower to control airspace and flight patterns over the Sedona area has been submitted to the Federal Aviation Administration and the tower is conceptually supported by the Noise Abatement Committee and the City.

5. *More effectively regulate the location of communications towers:*

A comprehensive ordinance is currently being prepared.

6. *Protect subsurface and Oak Creek water quality:*

Although the existing water quality of the area has not been substantially diminished, the shallow soils and porous geology can allow contaminants to enter the aquifer more readily than in some other geological circumstances. Sedona's wastewater has historically been disposed of primarily in septic systems, both individual and in subdivision common leach fields and, in some cases, small-scale treatment plants. Work on a centralized wastewater collection and treatment system began in the early 1990's. In 2000, an update of the Wastewater Master Plan was prepared to lay out an orderly progression for the installation of sewers in existing subdivisions. This Plan is now updated annually. All new development is required to design and construct sewer systems to connect to the City's sewer system. Expansion of the City's wastewater treatment plant capacity from one million to two million gallons per day was completed in January 2001. This expansion should come close to fulfilling the City's wastewater treatment needs for the buildout of the community based on current land use projections.

7. *Improve Storm Drainage and Flood Control:*

The Oak Creek watershed drains a 400 square mile area from the Mogollon Rim to the Verde River. Interspersing the area are dry creeks, washes and gullies that channel the water from often torrential rainstorms which can easily cause (and have caused) destructive erosional problems and flooding due to the soils in the area.

Urban runoff, is a combination of storm water from rainfall, snow melt, outdoor watering, and other surface drainage. This storm water picks up oil, dirt, litter and other materials on the ground and in the streets. These materials can affect our water supplies. As storm water travels through a conveyance system, it carries pollutants to lakes, rivers, wetlands, coastal waters, and ground waters, impairing water quality. As land is developed the amount of impervious area increases. Storm water can also seep into aquifers, which are often used to supply drinking water, such as here in Sedona.

The EPA requires under its "Phase II" regulation, that the City of Sedona reduce the discharge of pollutants from a regulated system to the "maximum extent practicable: to protect water quality. At a minimum, jurisdictions regulated under Phase II must:

- \$ Specify best management process for storm water management
- \$ Identify measurable goals for control measures

- \$ Show an implementation schedule of activities or frequency of activities
- \$ Define the entity responsible for implementation

The City of Sedona must submit for a National Pollutant Discharge Elimination System (NPDES) permit by January 2003. The Arizona Department of Environmental Quality (ADEQ) is requesting authority to implement the Phase II regulations versus EPA. Approval of the transfer of authority from the EPA to ADEQ is pending.

The City of Sedona is preparing to submit the NPDES permit. The first step is to develop a storm water master plan for the entire city. Public outreach and education is an important part of the success of implementing this program.

Floodplain management responsibilities are currently administered through the Coconino and Yavapai County Flood Control Districts, and the Sedona Public Works Department. Storm drainage improvements have been made in some areas and other specific improvements have been identified as needed Capital projects.

Discussion of issues and recommendations regarding water supply and conservation are covered in the *Water Resources Element*.

The US Forest Service has on-going efforts to mitigate damage on the National Forest by closing unauthorized roads and trails, regulation of jeep tours, recent on-site fee requirements and monitoring of archeological sites and through other conservation efforts. The US Forest Service also adopted new management strategies in conjunction with a major revision of the Coconino National Forest Plan (see Amendment 12 – *Open Space Element*).

10.2 RECOMMENDATIONS

10.2.1 Vision, Goals, Objectives/Policies

The following vision statement, goals, objectives and policies have been developed to address the effect of current development and future growth on air and water quality and natural resources within the community and the region:

ENVIRONMENTAL QUALITY VISION

Preserve Sedona's natural beauty, environmental quality and vital natural resources through appropriate stewardship of the land, ensuring visual and physical harmony between the natural and manmade environment.

GOAL 1.0 Ensure the maintenance of high air quality standards in the community and the region.

Objectives/Policies

- 1.1 Encourage methods for decreasing automobile dependence in the community including the promotion of pedestrian, bicycle and transit modes of transportation.
- 1.2 Encourage land use patterns and off-highway traffic circulation that provides access to commercial areas from residential neighborhoods to reduce stop and go travel on the highway.
- 1.3 *Ensure* that woodburning stoves and fireplaces do not contribute to air quality problems in Sedona.
- 1.4 Encourage and regulate where possible, the reduction of air pollutant emissions from businesses.
- 1.5 Work with US Forest Service to find the most benign methods to use in reducing the risk of fire while preserving and protecting regional air quality.
- 1.6 Evaluate the preparation of regulations to require "stage two" recovery for gasoline fumes relative to EPA provisions for compliance.
- 1.7 Cooperate and participate in regional planning to ensure high air quality in the Verde Valley.
- 1.8 Monitor and enforce air quality standards during construction of projects within the City.

GOAL 2.0 Maintain high water quality for Oak Creek and other surface and groundwater resources.

Objectives/Policies

- 2.1 Support the Arizona Department of Environmental Quality in its requirement that there be no additional effluent and other discharges into Oak Creek.
- 2.2 Evaluate the feasibility and possible development of a wellhead protection program in conjunction with the Arizona Department of Environmental Quality and private water companies.
- 2.3 Prepare and implement a comprehensive storm water drainage plan and work with the Environmental Protection Agency to establish a storm water master plan and management/pollutant monitoring program in compliance with National Pollutant Discharge Elimination System (NPDES) standards.
- 2.4 Prepare a comprehensive floodplain management system for Sedona.
- 2.5 Cooperate and participate in regional planning to ensure high water quality for both surface and subsurface water resources.
- 2.6 Employ best management practices for stormwater pollution control during construction of projects within the City.
- 2.7 Review recommendations from Section 206 of the Federal Flood Control Act and pursue Federal funding available for implementing these recommendations.
- 2.8 Support residential re-development out of floodway areas.

GOAL 3.0 Minimize the negative noise and view impacts of development on the natural environment.

Objectives/Policies

- 3.1 Continue to support development of regulations that protect dark night skies.
- 3.2 Continue to implement programs to achieve burial of overhead utility lines. Encourage the use of existing utility corridors wherever possible.
- 3.3 Continue to mitigate the effects of vehicular, construction and mechanically-generated noise on the community.
- 3.4 Continue to participate with and support the efforts of the Sedona Citizens Noise Abatement Committee in working with the Airport Administration to address aircraft noise and air traffic issues.

- 3.5 In order to provide alternatives to air tours as a source of revenue for the airport, the City should work with the Airport Administration in identifying, evaluating and determining under what conditions non-aeronautical uses at the airport can be supported, including compatibility with the existing and future traffic circulation system.
- 3.6 Evaluate and adopt new regulations for cell towers through coordination with the US Forest Service.
- 3.7 Mitigate the visual impacts of facilities, structures, utilities and mechanical installations through appropriate screening and locational criteria.

GOAL 4.0 Encourage conservation and protection of native wildlife and vegetation habitats.

Objectives/Policies

- 4.1 Inventory community wildlife resources and habitat areas and create a critical ecological habitat map to be used as a planning tool.
- 4.2 Promote regulations that require greater retention of existing native vegetation for new development projects and coordinate with the USFS in the evaluation of a potential program/policies regarding invasive weeds.
- 4.3 Promote the use of native low water use vegetation, especially drought tolerant plants in landscaping and discourage the inappropriate use of vegetation unsuited to Sedona's dry climate (e.g. riparian species in non-riparian areas).

GOAL 5.0 Promote compatibility between businesses and the natural environment.

Objectives/Policies

- 5.1 Maintain design and land use intensity guidelines appropriate to the natural environment.
- 5.2 Require future land development practices to be compatible with the existing topography, vegetation and scenic vistas.
- 5.3 Retain, encourage and plan areas for "environmentally clean" commercial and other employment uses that meet economic development goals and are compatible with adjacent land uses and the natural environment.
- 5.4 Encourage businesses to utilize recycled materials.

GOAL 6.0 Establish Sedona as a model community in terms of energy efficiency and conservation of natural resources.

Objectives/Policies

- 6.1 Evaluate existing community energy demands on a comprehensive basis (light, heat, transportation, etc.) to identify inherent systematic and operational inefficiencies as well as recommendations for better energy resource utilization.
- 6.2 Identify and require more energy-efficient site design and construction techniques.
- 6.3 Promote the use of passive solar energy and other alternative energy sources to light and heat residential and non-residential structures.
- 6.4 Develop methods to protect access to incident solar energy in future development.
- 6.5 Identify and implement ways to reduce transportation-related fuel consumption.

GOAL 7.0 Support the Community with an efficient and comprehensive plan for management of solid waste, including a recycling program.

Objective/Policies

- 7.1 Obtain a waste stream analysis for Sedona, and make appropriate recommendations for source reduction, reuse and recycling.
- 7.2 Develop community composting facilities.
- 7.3 Commit to a target and timetable for reducing the waste stream substantially.
- 7.4 Implement a resource recycling education program which emphasizes the importance of waste reduction, reuse and recycling.
- 7.5 Provide recycling opportunities for visitors.
- 7.6 Encourage a “buy recycled” campaign to help create markets for recycled materials.
- 7.7 Encourage local and regional businesses which use post-consumer recycled materials, especially those recovered from the local waste stream.

GOAL 8.0 Maintain existing drainage ways in their natural condition and maximize their potential benefits to the community.

Objectives/Policies

- 8.1 Identify drainage ways with potentially significant hydrologic, topographic, wildlife habitat, scenic resource, recreational and open space values for future preservation and community use.
- 8.2 Integrate natural drainage ways, open space and recreation resources into a comprehensive system.

10.2.2 Specific Recommendations

Water Quality

Wastewater

The completion of a centralized sewer system is the most important commitment the City is making to address water quality issues. Section 208 of the Environmental Protection Agency's Clean Water Act requires the City to demonstrate that it has a plan for wastewater disposal that will protect both surface and subsurface water quality. The City should continue to take an active role in revisions and implementation of its 208 Water Quality Plan under the authorization of Northern Arizona Council of Governments (NACOG). In the October 2000 amendment to the NACOG 208 Plan, the City expanded its Planning Area, generally incorporating the area two miles beyond the City Limits. The Planning Area is the area in which the City has an interest in ensuring that there is coordination and adequate regional planning of wastewater collection and treatment services. The City may or may not choose to connect systems outside the City Limits but within the Planning Area based on available capacity, environmental necessity and economic feasibility. Future development within the Planning Area should be served by the sewer system where these conditions are favorable to the connection.

There are also other previously-stated objectives that can be pursued to ensure that high water quality is maintained for both Oak Creek and the underground aquifer. The City should support the Arizona Department of Environmental Quality's requirements regarding no additional effluent discharges into Oak Creek and monitor the implementation measures provided in the "Unique Waters" designation of Oak Creek.

Wellhead Protection Program

Although groundwater is somewhat protected by layers of rock and soil, it is vulnerable to many types of contamination (i.e. landfills, waste storage, chemical spills, leaking underground storage tanks, improperly managed hazardous waste sites, fertilizers and pesticides, sewage, animal waste and other source).

Effectively managing the land area around a well to prevent groundwater contamination offers an opportunity to preserve drinking water resources and save money. EPA has indicated that, on the average, clean up of contaminated groundwater supplies may be 30 to 40 times more costly than prevention.

The State of Arizona has a Wellhead Protection Program (WHP) designed to protect groundwater resources by actively coordinating local pollution prevention efforts with existing state programs. The state program is voluntary and designed to be locally initiated and operated with ADEQ playing a supporting role. ADEQ support includes both assistance with the program development and technical resources.

The Wellhead protection Program can be used as a tool for managing a community's water resources. As part of the overall goal of managing local groundwater, community needs are defined, both for present and future conditions. Plans for population growth, residential development, and economic and commercial development and redevelopment can provide useful information to help community's determine areas that need to be protected and managed.

A major component of a Wellhead Protection Program is determining the zones surrounding wells where possible contamination may occur. These zones are usually denoted as Wellhead Protection Areas and are generally defined as the surface area surrounding a water well supplying a public water system, through which contaminants are reasonably likely to move toward and reach the well.

EPA has recommended the following five criteria as a technical base for delineating wellhead protection areas:

- \$ Distance
- \$ Drawdown
- \$ Time of travel
- \$ Flow boundaries
- \$ Assimilative capacity

Land use information can help identify possible locations for specific sources of contamination. ADEQ has compiled a list of potential land use sources and their relative risk. In general, groundwater contamination stems from the misuse and improper disposal of liquid and solid wastes. Contaminants can also stem from atmospheric pollutants, such as airborne sulfur and nitrogen compounds, which are created by smoke, dust, aerosols, automobile emissions, fall as acid rain, and percolate through the soil. When the land uses identified as possible contamination sources are managed properly, groundwater contamination is not likely to occur.

Applying wellhead protection area boundaries around public water well systems can assist a community in managing and helps to ensure protection of water resources. In conjunction with establishing protection areas, and to help prevent future pollution problems, an evaluation of both existing and potential sources of contamination within the wellhead protection areas provides Community's with an understanding of the degree of potential threat to groundwater based on land uses within the wellhead protection area. This can be accomplished by conducting

an inventory of local land uses and potential contaminant sources. This is especially helpful when new development or redevelopment occurs within a wellhead protection area, as it provides basic information that can be used as a design review management tool.

ADEQ provides assistance and management tools in planning and providing on-going protection of water resources. Some management tools may include ordinances that regulate practices, wastewater discharge, household hazardous waste collection, floodplain protection, overlay groundwater protection districts, prohibition of land uses, special permitting, performance standards, and drainage requirements.

The City should evaluate the feasibility and possible development of a Wellhead Protection Program.

Stormwater Planning, Management and Pollutant Monitoring

The City should also work with the Environmental Protection Agency to establish storm water planning, management and pollutant monitoring in compliance with National Pollutant Discharge Elimination Systems (NPDES) standards. One of the potential outcomes is the establishment of standardized requirements for drainage filtering systems to ensure their effectiveness in trapping silt and petroleum byproducts.

Air Quality

Although air quality issues were raised in the initial planning process in 1990, maintaining superior air quality was a much higher priority in both 1997 and 2001. Several recommendations to address air quality issues, most of which were provided by the City Council Advisory Committee on Growth, are found in the objectives and future actions of this element.

Increasing traffic and traffic congestion are probably the most significant factors impacting air quality in Sedona. The City should continue to pursue ways to decrease automobile dependence in the community, including the promotion of pedestrian, bicycle and transit modes of transportation.

Wood smoke pollution has also been cited as a potential contributor toward reduced air quality. Wood smoke may also be a regional consideration as smoke in the higher elevations of the Verde Valley tends to drift to lower areas. In 1998, the Advisory Committee on Growth listed the need for an ordinance restricting wood-burning stoves and fireplaces as one of its ten key recommendations. This recommendation was incorporated into the 1998 Community Plan update. In late 1998, a survey of 145 appliances (fireplaces, fireplace inserts, woodstoves) was conducted. 70% of the appliances were gas log and 30% were woodburning. The City also collected data through 1999 as well. Although the data collected does not indicate a major problem now, the City should focus on the issue of future fireplaces, rather than new and existing woodstoves and existing fireplaces. A new ordinance or incentive program could help ensure that new fireplaces do not add to air quality problems.

Floodplain Management

The City should create, in conjunction with other appropriate agencies, a comprehensive floodplain management system for Oak Creek to ensure the safety of adjacent property owners. The City should also implement a comprehensive drainage plan.

Although some specific drainage improvements have been made, future planning for areas in need of the most critical improvements should be an on-going capital budget expenditure, and is a general policy of the Flexible Capital Budget (capital improvements program).

City-wide, the costs of actual improvements may have to eventually be funded through alternatives to capital funding. The formation of special improvement districts may be the best long-term solution to assuring comprehensive implementation.

Utility Undergrounding

During the Town Hall meetings conducted in 1997 in conjunction with the Flexible Capital Budget (capital improvement program) process and during public input opportunities with the City Council Advisory Committee on Growth (1997), the need for burying existing overhead lines was strongly expressed and is a very high priority for the community.

Although the City has a cooperative agreement with APS and has committed significant capital funding toward utility undergrounding, the costs are very high even with a 55/45 match. Formation of special improvement districts and/or other funding alternatives may be necessary to comprehensively implement this program.

New subdivisions are currently required to place existing overhead electrical lines underground. New development can also be required to place these lines underground in conjunction with a zone change. However, there is currently no requirement for commercial and multi-family projects to do this under the City's development review process. In addition, APS is now replacing existing wooden poles with metal poles that cannot be painted. If metal poles are used, self-weathering steel power poles should be used rather than galvanized poles. The City should evaluate its authority to require new commercial and multi-family developments to place overhead electrical lines underground as part of the development review process and adopt regulations accordingly. As part of this evaluation, the City should also assess its ability to require the undergrounding of utilities in established residential areas as well.

On-going Conservation Planning Considerations

As discussed in the original Situation Assessment of the Community Plan, and from issues identified at community meetings, the water quality of Oak Creek and the groundwater aquifer; pollution threat of these water resources; air, noise and light pollution; the constant problems of erosion due to grading; flood control; the suitability of area soils to various types of development and the need to conserve and recycle natural resources are all critical concerns of the Sedona community.

In accordance with ARS 9-461.05, cities of 50,000 persons or more are required to include a Conservation Plan Element prepared as part of a General Plan in Arizona that:

Addresses “*the conservation, development and utilization of natural resources, including forests, soils, rivers, and other waters, harbors, fisheries, wildlife, minerals and other natural resources. The Conservation Element may also cover:*

1. The reclamation of land
2. Flood control and drainage
3. Prevention and control of the pollution of streams and other waters
4. Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan
5. Prevention, control and correction of the erosion of soils, beaches and shores
6. Protection of watersheds

Although not required, cities under 50,000 population may include a Conservation Plan Element as part of their general plan. In the future, the City should evaluate the need for incorporation of a Conservation Element as part of the **Sedona Community Plan** to more comprehensively address the issues discussed in this *Environmental Element*.

In order to prepare the Conservation Plan Element for the **Sedona Community Plan**, representatives from the City Council, Planning and Zoning Commission, State Department of Environmental Quality, Soil Conservation Service, US Forest Service, local and regional environmental groups, the business community, and the community at large, should work together to develop a process for both its preparation and review.

Aircraft Noise

The Sedona Airport Administration estimates that there are approximately 50,000 current annual aircraft operations or 25,000 flights per year at the airport. The 1999 Sedona Airport Master Plan projects approximately 62,000 annual operations by 2017. Existing aviation noise levels are diminished by the 400-500 foot elevation of the airport above the City and the limited length of the runway. The orientation of the runway, based on meteorological data, facilitates landing and take off operations to the southwest (over lower density developed areas of the City. Even though the environmental characteristics (i.e. elevation, location, geography) of the airport assist in the reduction of noise and the runway length limits the type and size of aircraft usage, aircraft operations over the City and the surrounding area continue to generate complaints from residents regarding aircraft noise. In 1999, the Sedona Citizens Noise Abatement Committee prepared an Aircraft Noise Survey to enable the Airport Administration to get a better understanding of the frequency and intensity of Aircraft sound in the greater Sedona area. The mapped location of incidents from the surveys indicates a very widespread pattern that lends support for a “Class D” or controlled Airspace” designation that can better control aircraft overflights. Once a control tower is in place, the flight pattern over the Sedona area can be adjusted and in most cases shortened. Less time would be required to blend air traffic into a flight pattern and at many times allow direct landing and departure of aircraft without circling the area. The Committee

and the Sedona City Council have endorsed the control tower concept and an application is pending.

In May, 2001, a questionnaire was mailed to Sedona area residents to learn more about the scope of aircraft sound issues effecting the community. The survey indicated that approximately 60% of the respondents considered aircraft noise to be a problem and the majority identified tour operations as the source of their discomfort.

One potential solution to reduce the number of future air tour companies locating at the airport is to find ways to encourage non-aeronautical land uses at the airport that are compatible with the existing and future traffic circulation system in order to provide alternatives to air tours as a source of revenue for the airport.

10.3 ACTION PROGRAM

The Action Program for the *Environment Element* of the **Sedona Community Plan** lists the specific action necessary to implement the Community Plan.

The Planning and Zoning Commission should review and provide recommendations to the City Council for revising the following Action Program on an annual basis in order to continue to pursue implementation of the **Sedona Community Plan** in an expeditious manner and to coincide with the annual strategic planning and Flexible Capital Budget process.

Future Actions

1. Create a native plants ordinance to preserve more existing native vegetation and trees within new development projects where possible and coordinate with the USFS in the evaluation of a potential program/policies regarding invasive weeds. (*2002-03 Work Program*). Educate citizens on the importance of preserving and/or planting native, drought-tolerant vegetation and encourage local nurseries to carry a greater selection of native plants.
2. Prepare and implement a comprehensive storm water drainage plan and work with EPA to establish a management and pollution monitoring program that complies with NPDES standards.
3. Evaluate and possibly adopt regulations requiring new commercial and multi-family development to place overhead electrical lines underground as part of the City's development review process. Evaluate the City's ability to require undergrounding of utilities in established residential neighborhoods. The required use of self-weathering steel, rather than galvanized poles should also be evaluated.
4. In order to provide alternatives to air tours as a source of revenue for the airport, the City should work with the Airport Administration in identifying, evaluating and determining under what conditions non-aeronautical uses at the airport can be supported, including compatibility with the existing and future traffic circulation system. Future Community Plan amendment considerations may include examples of compatible uses at the airport that could guide the creation of an airport zone that addresses specific uses and development standards for non-aeronautical uses at the airport.
5. Prepare a comprehensive floodplain management system for Sedona.
6. Prepare a new ordinance or incentive program to restrict woodburning fireplaces in new construction. Evaluate past and present particulate levels, building permit data and other communities' programs in determining the best approach for the City.
7. Develop locational criteria and development guidelines for water storage tanks.

8. Prepare an inventory of wildlife resources and habitat areas and create a critical ecological habitat map to be used as a planning tool.
9. Work with US Forest Service to find the most benign methods to use in reducing the risk of fire while preserving and protecting regional air quality.
10. Evaluate and possibly implement methods for increasing energy efficiency and the conservation of natural resources including a potential community-wide energy code and resource conservation program to encourage energy consciousness from residents, businesses, property owners and developers.
11. Evaluate the feasibility and possible development of a wellhead protection program in conjunction with ADEQ and private water companies.
12. Evaluate the need for a Conservation Element of the Community Plan that would more comprehensively address the issues discussed in the Environmental Planning Element.
13. Evaluate and possibly adopt standards for regulating air pollutant emissions from businesses.
14. Evaluate the preparation of regulations to require “stage two” recovery for gasoline fumes relative to EPA provisions for compliance.

On-going/In Process:

- Continue to implement the Trails and Urban Pathways Plan and other pedestrian/bicycle improvements (see also *Open Space Element*).
- Continue to pursue a program and commit funding to bury overhead utility lines.
- Complete the Sedona Area Shuttle Transit Feasibility Study. Evaluate specific implementation needs based on results.
- Strengthen and enforce littering and covered load regulations